[10191/2370]

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:	Heinz LUFT	Confirmation No.: 8941
For	FUEL INJECTOR AND METHOD FOR ITS ADJUSTMENT	Examiner: Christopher S. Kim
		Art Unit: 3752
Filed:	August 21, 2002	
Serial No.:	10/089,668	
Customer No.:	26646	

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF TRANSMITTAL

SIR:

Transmitted herewith for filing in the above-identified patent application, please find an Appeal Brief pursuant to 37 C.F.R. § 41.37.

Please charge the Appeal Brief fee of $500.00, and any other fees that may be required in connection with this communication to the deposit account of **Kenyon & Kenyon**, deposit account number **11-0600**.

Applicant hereby requests a two-month extension of time for submitting the Appeal Brief. The extended period for submitting the Appeal Brief expires on December 4, 2005. Please charge the $450.00 extension fee and any other fee that may be required to Deposit Account No. 11-0600. A duplicate of this Transmittal is enclosed

Respectfully submitted,

Dated: 12/1/05

By: (Reg. No. 41,172) DERVIS MAGISTRE
Gerard A. Messina
Registration No. 35,952

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KENYON & KENYON
One Broadway
New York, NY 10004
(212) 425-7200
CUSTOMER NO. 26646

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ZW

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Date: 12/1/05

Signature: R. Hannan
~~Dervis Magistre (Reg. No. 41,172)~~

APPEAL BRIEF PURSUANT TO 37 C.F.R. § 41.37

SIR:

On August 4, 2005, Appellant filed a Notice of Appeal from the final rejection of claims 26 to 29 contained in the Final Office Action issued by the United States Patent and Trademark Office on March 14, 2005 in the above-identified patent application.

In accordance with 37 C.F.R. § 41.37, this brief is submitted in support of the appeal of the final rejections of claims 26 to 29. For at least the reasons set forth below, the final rejections of claims 26 to 29 should be reversed.

1. REAL PARTY IN INTEREST

The real party in interest in the present appeal is Robert Bosch GmbH, Postfach 30 02 20, 70442 Stuttgart, Federal Republic of Germany. Bosch is the assignee of the entire right, title, and interest in the present application.

2. RELATED APPEALS AND INTERFERENCES

There are no other prior or pending appeals, interferences or judicial proceedings known by the undersigned, or believed by the undersigned to be known to

Appellant or the assignee, Bosch, "which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal."

3. STATUS OF CLAIMS

Claims 1 to 25, 30, 31, and 33 to 50 have been canceled.

Claim 32 has been allowed.

Claims 26 to 29 stand rejected under 35 U.S.C. § 102(e) as anticipated by International Patent Application Publication No. WO 01/11220 ("Boecking").

Appellant appeals from the final rejections of claims 26 to 29.

A copy of the appeal claims, *i.e.*, claims 26 to 29, is attached hereto in the Claims Appendix.

4. STATUS OF AMENDMENTS

In response to the Final Office Action issued on March 14, 2005, Appellant filed a "Reply Under 37 C.F.R. § 1.116" on July 11, 2005. However, the Reply did not contain any amendments.

5. SUMMARY OF THE CLAIMED SUBJECT MATTER

The present application relates to a fuel injector for a fuel injection system of an internal combustion engine. Fig. 1 shows an example of a conventional fuel injector. *Substitute Specification*, page 4, lines 16 to 17. Fig. 2 shows an example embodiment of a portion of a fuel injector according to an embodiment of the invention. *Id.*, page 7, lines 8 to 9. A restoring spring 23 may act on a valve needle 3 in a closing direction so that a valve closing body 4 may be held sealingly on a valve seat face 6. *Id.*, page 6, lines 3 to 22. A magnetic coil 10 may be provided to create a magnetic field to move an armature 20, which may be friction-locked to the needle 3, so that the needle 3 may be lifted up from the valve seat face 6. *Id.*, page 6, lines 3 to 31. A sleeve 24 may be provided to pre-stress the spring 23 so that the spring 23 may act on the valve needle 3 in a closing direction. *Id.*, page 6, lines 8 to 22. An adjusting body 40 may be provided within the sleeve 24 and may be used for adjusting the flow of fuel through the injector in the open static state by adjusting its position within the sleeve 24. *Id.*, page 7, lines 11 to 35.

6. GROUNDS OF REJECTIONS TO BE REVIEWED ON APPEAL

Whether claims 26 to 29, which stand rejected under 35 U.S.C. § 102(e), are patentable over Boecking.

7. ARGUMENTS

Rejection of Claims 26 to 29 Under 35 U.S.C. § 102(e)

Claims 26 and 27

Claims 26 and 27 stand rejected under 35 U.S.C. § 102(e) as anticipated by Boecking. It is respectfully submitted that Boecking does not anticipate either of claims 26 and 27 for at least the following reasons.

It is "well settled that the burden of establishing a *prima facie* case of anticipation resides with the [United States] Patent and Trademark Office." *Ex parte Skinner*, 2 U.S.P.Q.2d 1788, 1788 to 1789 (Bd. Pat. App. & Inter. 1986). To anticipate a claim, each and every element as set forth in the claim must be found in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of Calif.*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). That is, the prior art must describe the elements arranged as required by the claims. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990).

Claim 26 relates to a fuel injector and recites "a valve needle mechanically linked to the actuator and to be acted upon by a restoring spring in a closing direction . . .; a sleeve to pre-stress the restoring spring; and an adjusting body placed in direct contact with the sleeve so as to be adjustable."

The Examiner refers to nozzle spring 12 of Boecking as allegedly disclosing the recited restoring spring, to element 13 of Boecking as allegedly disclosing the recited sleeve, and to element 16 of Boecking as allegedly disclosing the recited adjusting body. With respect to the sleeve, element 13 of Boecking is not provided to pre-stress the spring 12. Instead, with respect to the spring, the element 13, which is integrally formed with the nozzle needle 5, is provided for receiving the spring 12 so that the spring 12 may apply a force against it urging the element 13 and the nozzle needle 5 in a closing direction. In the arrangement provided by Boecking, the force applied by the element 12 to the spring 12 is not desired. Accordingly it is not provided "to pre-stress the restoring spring." It is noted that the feature of a "sleeve to pre-stress the restoring spring" is not merely a recitation of intended use, but instead requires a particular structure. It requires positioning of the sleeve such that it applies a desired force to the restoring spring, e.g., so that the restoring spring can act upon the valve needle in a closing direction. For example, for a spring that acts upon the valve needle in a closing direction that is towards an injection end, if the sleeve is provided at

a non-injection end of the spring, it applies the desired force to cause the spring to act upon the valve needle in the closing direction; but if the sleeve is provided, as in Boecking, at the injection end of the spring, it does not apply the desired force.

Further, with respect to the adjusting body, element 16 of Boecking is not adjustable since it remains stationary. Only the element 13 and the remaining portion of the nozzle needle 5 is moved in a non-injection direction within the fuel injector so that it is moved with respect to the element 16. The movement between elements 13 and 16 is caused by a force applied to the nozzle needle 5, but not to element 16.

Accordingly, Boecking does not disclose, or even suggest, all of the features recited in claim 26. It is therefore respectfully submitted that Boecking does not anticipate claim 26.

Claim 27 depends from and therefore includes all of the features recited in claim 26. It is therefore respectfully submitted that Boecking does not anticipate this dependent claim for the same reasons set forth above in support of the patentability of claim 26.

In view of all of the foregoing, reversal of this rejection is respectfully requested.

Claim 28

Claim 28 stands rejected under 35 U.S.C. § 102(e) as anticipated by Boecking. It is respectfully submitted that Boecking does not anticipate claims 28 for at least the following reasons.

As an initial matter, claim 28 depends from claim 26 and therefore includes all of the features recited in claim 26. It is therefore respectfully submitted that Boecking does not anticipate this dependent claim for at least the same reasons set forth above in support of claim 26.

Furthermore, claim 28 recites that "the restoring spring is supported on an injection end of the sleeve." The nozzle spring 12 of Boecking is supported on a ***non-injection end*** of element 15, referred to by the Examiner as allegedly disclosing the sleeve. For this additional reason, it is respectfully submitted that Boecking does not anticipate claim 28.

In view of all of the foregoing, reversal of this rejection is respectfully requested.

Claim 29

Claim 29 stands rejected under 35 U.S.C. § 102(e) as anticipated by Boecking. It is respectfully submitted that Boecking does not anticipate claims 29 for at least the following reasons.

As an initial matter, claim 29 ultimately depends from claim 26 and therefore includes all of the features recited in claim 26. It is therefore respectfully submitted that Boecking does not anticipate this dependent claim for at least the same reasons set forth above in support of claim 26.

Furthermore, claim 29 recites that "the position of the adjusting body is variable in the sleeve via a first adjusting tool." The Examiner has not indicated where Boecking discloses this feature. Indeed, it is respectfully submitted that Boecking does not disclose, or even suggest, this feature. Variations in the position of the element 16, referred to by the Examiner as allegedly disclosing the adjusting body, with respect to element 13, referred to by the Examiner as allegedly disclosing the sleeve, is caused by movement of the valve needle 5 in an opening direction under fluid pressure. For this additional reason, it is respectfully submitted that Boecking does not anticipate claim 29.

In view of all of the foregoing, reversal of this rejection is respectfully requested.

8. CONCLUSION

For at least the reasons indicated above, Appellant respectfully submits that the art of record does not disclose or suggest the subject matter as recited in the claims of the above-identified application. Accordingly, it is respectfully submitted that the subject matter invention recited in the claims of the present application is new, non-obvious, and useful.

In view of all of the foregoing, reversal of all of the rejections set forth in the Final Office Action is therefore respectfully requested.

Respectfully submitted,

By: [signature] (Reg. No. 41,172)

Dated: 12/1, 2005 By: [signature] DERVIS MAGISTRE

Gerard A. Messina
Registration No. 35,952

KENYON & KENYON
One Broadway
New York, New York 10004
(212) 425-7200
CUSTOMER NO. 26646

APPENDIX

26. A fuel injector for a fuel injection system of an internal combustion engine, in particular for direct injection of fuel into a combustion chamber of the engine, the fuel injector comprising:

an actuator;

a valve closing body to form a sealing seat with a valve seat face;

a valve needle mechanically linked to the actuator and to be acted upon by a restoring spring in a closing direction, to actuate the valve closing body;

a sleeve to pre-stress the restoring spring; and

an adjusting body placed in direct contact with the sleeve so as to be adjustable so that a fuel amount flowing per unit of time through the fuel injector depends on a position of the adjusting body in the sleeve.

27. The fuel injector of claim 26, wherein the sleeve is inserted into a central recess in the fuel injector.

28. The fuel injector of claim 26, wherein the restoring spring is supported on an injection end of the sleeve.

29. The fuel injector of claim 27, wherein the position of the adjusting body is variable in the sleeve via a first adjusting tool.

EVIDENCE APPENDIX

No evidence has been submitted pursuant to 37 C.F.R. §§1.130, 1.131, or 1.132. No other evidence has been entered by the Examiner or relied upon by Appellant in the appeal.

RELATED PROCEEDINGS APPENDIX

As indicated above in Section 2 of this Appeal Brief, "[t]here are no other prior or pending appeals, interferences or judicial proceedings known by the undersigned, or believed by the undersigned to be known to Appellant or the assignee, Bosch, 'which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.'" As such, there no "decisions rendered by a court or the Board in any proceeding identified pursuant to [37 C.F.R. § 41.37(c)(1)(ii)]" to be submitted.